Inside Wallops

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Goddard Space Flight Center
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NASA's X-43A Proves Hypersonic Scramjet Flight

NASA's second X-43A hypersonic research aircraft flew successfully on Saturday, March 27, the first time an airbreathing scramjet powered aircraft has flown freely.

carrying the X-43A lifted off the runway.

The X-43A, mounted on a modified Pegasus booster rocket, was launched from the B-52B just before 2 p.m.

NASA photo by Jim Ross

A modified Pegasus rocket ignites moments after release from the B-52B, beginning the acceleration of the X-43A over the Pacific Ocean.

The rocket boosted the X-43A up to its test altitude of about 95,000 ft. over the Pacific Ocean, where the X-43A separated from the booster and flew freely for several minutes following scramjet engine operation, in order to gather aerodynamic data.

The unpiloted vehicle's supersonic combustion ramjet, or scramjet, ignited as planned and operated for the duration of its hydrogen fuel supply, which lasted about 10 seconds. The X-43A reached its test speed of Mach 7.

"It's been a great, record-breaking day," said Larry Huebner, NASA Langley Research Center's Hyper-X propulsion lead. "We achieved positive acceleration of the vehicle while we were climbing, and maintained outstanding vehicle control. This was a world-record speed for air-breathing flight," Huebner said.

The flight, originating from NASA's Dryden Flight Research Center, began at 12:40 p.m. PST, as NASA's B-52B launch aircraft

"Today was a grand-slam in the bottom of the 12th," said Joel Sitz, NASA Dryden Flight Research Center's X-43A project manager. "It was fun all the way to Mach 7. We separated the research vehicle from the launch vehicle, as well as separating the real from the imagined," Sitz said.

NASA's Langley Research Center and Dryden Flight Research Center jointly conduct the Hyper-X program. ATK GASL (formerly MicroCraft, Inc.) in Tullahoma, Tenn., built the vehicle and the engine, and Boeing Phantom Works in Huntington Beach, Calif., designed the thermal protection and onboard systems. The booster is a modified Pegasus rocket built by Orbital Sciences Corp. Chandler, Ariz.

A Job Well Done

I wanted to take a moment and call your attention to the superb support afforded me and members of my Calipso review board by Sherry Bunting and the NASA-8 Flight Crews and Ground Team.

Thanks to their professionalism, attention to detail, and obvious dedication my group was able to benefit from the efficiency that NASA-8 travel permits despite higher than normal volatility with our schedule.

Working with Sherry to make all the necessary arrangements was a pleasure. She was proactive, always made clear what actions were open on my side, and adapted to the unique requirements of our itinerary quickly and accurately.

Please pass along my appreciation for a job very well done. Always a privilege to fly with Wallops!

Bob Menrad, Systems Review Office, Goddard Space Flight Center

Wallops Shorts…….

On March 11, Gabe Garde and Tracy Bohaboj, Physical Science Laboratory, gave 22 high school students and officials in the Rocket and Technology Club from Worcester County School District a presentation about the Balloon Program Office activities. They were shown demonstrations of material testing, viewed launch video, and toured the balloon lab.

In the News

SpaceFlight Now.com
"UAV Completes First Operational Flights"

Sport Rocketry Magazine
"Nike-Orion"

Ballooning Magazine
"NASA at the Museum"

The Daily Times
"Rockets Launch Learning"

The Daily Times
"Emerging Technology Key in Region's Economic Future, Business Leaders Say"

WBOC TV, Salisbury, MD
An interview with Phil Ward, NASA GNC and Mission Systems Engineering Branch, aired on WBOC TV 's nightly news segment on March 23. Ward was among several Wallops personnel taking part in the Technology Seminar at Salisbury University.

On the Road

Keith Koehler, NASA Public Affairs Office, was guest speaker for the Sunrise Rotary Club, Salisbury, MD, on March 24, 2004

Al Beebe, NASA Observational Science Branch, and Jeff Reddish, NASA Range and Mission Management Office, participated in Accomack County's Annual Career Day Event held March 25. Approximately 400 students attended from Tangier, Nandua, Arcadia, and Chincoteague High Schools.

Daylight Saving Time

begins at 2 a.m. on Sunday, April 4. Set clocks ahead 1 hour

Recreational Use of Wallops Island

NASA Wallops Flight Facility will once again cooperate with the U.S. Fish and Wildlife Service in their effort to protect the piping plover, which is classified as an endangered species along the Atlantic Coast.


Piping Plover

The north and south ends of Wallops Island have been deemed nesting areas for the piping plover and are closed to pedestrian and vehicular use from March 15 until September 1, 2004. Anyone disturbing a protected species or their nest is subject to state and federal penalties as prescribed by the Endangered Species Act.

The only area now open for recreational use is between the north end of all Wallops launch sites and south of the cable barrier running across the beach.

Pedestrian access points are the dune crossing east of the old helicopter pad and the dune crossing east of Camera Station 15. Off-road vehicles (ORV) can gain access via the dirt road to the dune crossing east of Camera Station 15. Except for this crossing point ORVs are not to be driven on or over dunes or into closed areas.

The recreational beach area may be used only during non-operational hours between sunrise and sunset. Non-operational hours are normally weekends and holidays and before 7:30 a.m. and after 4:40 p.m. on weekdays. Launch operations may require additional closure of the recreational beach area.

Users are requested to notify the Island Gate security guard if anyone is observed violating the protected areas or any wildlife habitat on Wallops Island. Failure to comply with beach use restrictions will result in closure of the island for recreational use.

Your continued support will help keep Wallops Island open for recreational use while protecting its natural beauty.

Tickets are Available

Theme park discount tickets are now available for Kings Dominion, Busch Gardens & Water Country at the WEMA Exchange in Building E2

Call Karen S. Thornes, on x2020 for additional information.

April Events at the NASA Visitor Center

Saturday, April 3
Model Rocket Launch
A model rocket launch will be held at 1 p.m. on the Visitor Center grounds. Models of various rockets will be launched. Model rocketeers are invited to bring their own rockets and launch them. The launch will be canceled if it is raining or winds exceed 18 mph.

Saturday, April 10
Head in the Clouds
What is so important about a few clouds in the sky? What would happen to Earth if there were no clouds? During this 45-minute program, participants will discover the role of clouds in Earth's atmosphere and learn to identify the most common cloud types.

Saturday, April 17
Junior Girl Scout
Aerospace Merit Badge Program
Junior Girl Scouts will have the opportunity to fulfill the requirements of the Aerospace Merit Badge. This program is open to Junior Girl Scouts only. Registration is required by April 8 and space is limited.

For more information on Visitor Center programs, call 824-2298.

Every Monday and Wednesday Wallops Music Club gets together at 5 p.m. in Building F-3. Players, singers and listeners are welcome!!

Every Wednesday the Dart League meets at 5:30 p.m. in Building F-3

Open House in the Wallops Library - "Preserving the Past, Navigating the Future"

The Wallops Library Open House will feature demonstrations of a variety of tools that help preserve the past and navigate the future.

Demonstrations will include: Balloon Technology Documents Database, Ask A Librarian - Now Enhanced with Real-Time Reference, MyLibrary Portal, Library1Search, IMAGES (Image and Movie Archive of Goddard's Earth and Space Sciences), Website Capture Project, and a New Children's Collection.

Refreshments and give-a-ways will be provided.

The Open House will be held on Wednesday, April 14 from 9 a.m. – 2 p.m. in the Wallops Technical Library, Building E105.

What is the non-event

by Mike Vandeveer, Occupational Safety and Health Office

We know what happens when an accident occurs. At a minimum productivity stops in the immediate area.

Accidents don't happen when safety systems are strong enough to prevent them, when everyone involved in a project plays the "What if game".

NASA's "Lock-out/ Tag-out" control of hazardous energy is a mandatory OSHA program designed to prevent death and/or serious injuries as a result of inadvertent exposure to hazardous energy. The L-O/T-O system requires that qualified individuals perform certain steps, in required sequence, in order to lock out and tag out hazardous energy thus preventing accidents.

When everything is done with the correct materials, by certified employees, in the required sequence, at the proper time, under ideal conditions, following exact procedures, we have what I call the "non" event.

Accidents, incidents, mishaps and close calls are reported, recorded, investigated, documented, published, scrutinized, discussed and used to make policy for the prevention of similar occurrences.

No one except the employee and perhaps the supervisor that made the non-event occur ever know anything happened.

The value of a non-event is incalculable. No one really thinks about it, and very few people understand or try to grasp the concept. Many hours of training, dedication of resources, certification processes, policy guidance and procedure development are required to produce the non-event.

Often the simple act of complacency will undue the non-event turning it into a full blown accident. For example, having followed the checklist a thousand times, step-by-step, the process is done from memory resulting in an accident.

Think about what the non-event is in your work area and then take the time to correct it before an accident takes place.

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